Name: _____ TP: _____

HW 66A: Solve Radical Equations
FORM A 2015
Geometry
Due: Monday, February 24th, 2014

Directions: CIRCLE the **three** problems that you have *not* worked on in class this semester. This will show your teacher if you are aware of which problems you should confidently solve. You must attempt the circled problems as well, and they will count as extra credit on EVERY homework assignment! You must show all work on every problem, or you will not receive full credit (and will land yourself in LaSalle).

_____ / 7 _____ / 3

1)

. The flight of a projectile is modeled by the function $d = -5t^2 + 18t + 8$, where d represents distance above the ground measured in meters, and t represents time of flight measured in seconds. According to this model, the projectile will hit the ground when $t = ?$

F. 1
G. 2
H. 4
J. 4.4
K. 5.2

$d = -5t^2 + 18t + 8$

*We don't know the value of t... so plug in answer choices until d=0!

2)

What is the value of the expression $\frac{x^2 - 2z}{y}$ for $x = 4$, $y = 2$, and $z = 3$?

F. 5
G. 4
H. 1
J. 0
K. --1

3) Simplify: $5rs^3 \cdot 2r^{-2} \cdot s$

① multiply coefficients (5·2)
② Add r exponents
• negative exp. goes below
③ Add s exponents

4)

. $(3x + 2)(5x - 1)$ is equivalent to:

A. $20x^2$
B. $8x + 1$
C. $15x^2 - 2$
D. $8x^2 + 4x + 1$
E. $15x^2 + 7x - 2$

F:

O:

I:

L:

Bringin' Zesty Back. Yeah!

5) You are eating dinner with three of your friends and the bill is $48.00. How much money will you pay in total if you are leaving a 20% tip?

$48.00

① % to decimal
② MULTIPLY
③ You are leaving a tip... + or - ?

6) Find the slope of (-8, 2) and (-5, 11).

7) Solve:

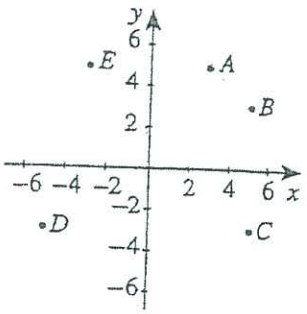
$72 = 9\sqrt{x+4}$

① Opposite of 9.

8)

. Which point in the standard (x,y) coordinate plane below has the coordinates $(-3,5)$?

A. A
B. B
C. C
D. D
E. E



9)

. A bag contains 4 red jelly beans, 5 green jelly beans, and 3 white jelly beans. If a jelly bean is selected at random from the bag, what is the probability that the jelly bean selected is green?

F. $\frac{1}{12}$
G. $\frac{1}{5}$
H. $\frac{5}{23}$
J. $\frac{5}{12}$
K. $\frac{5}{7}$

$\frac{\text{Green}}{\text{TOTAL}}$

10)

. For what value of x is the equation $2(x-6)+x=18$ true?

F. 15
G. 10
H. 8
J. 4
K. 2

① Distributive Prop.
② Combine like terms
③ Opposite of -12... ____
④ Opposite of 3x... ____

Bringin' Zesty Back. Yeah!

Name: _____ TP: _____

HW70: Radical Equations, Substitution, FOIL, Sl
2015 FORM A Geometry
Due Date: Wednesday, February 26th, 2014

Failure to show all work and write in complete sentences will result in LaSalle.

1) *Explain* how to solve the equation below (use the words "isolate" and "inverse operation").

$$-3\sqrt{x+8} = -6$$

First,

2) In the box to the write, *correct and explain* the error Ambrocio made in solving the problem below:

$(\sqrt{1-11n+5})^2 = (15)^2$

$1-11n+5 = 225$

$6-11n = 225$

$-6 \quad -6$

$\frac{-11n}{-11} = \frac{219}{-11}$

$n = -\frac{219}{11}$

3) Solve: undo this last!

$4 = 2 + \sqrt{p-3}$

4) Simplify:

$3u^{-4}v^3 \cdot 3u^4$

$3 \cdot u^{-4} \cdot v^3 \cdot 3 \cdot u^4$

$3 \cdot 3 =$ ___

$u^{-4+4} =$ ___

$v^3 =$ ___

All together: ___

5) Simplify:

$\frac{ba^4}{a^3b^3}$

$\frac{baaaa}{aaabbb}$

* Top & bottom cancel!

6) Simplify:

$(-4x^3y^{-2})^3$

$(-4 \cdot x^3 \cdot y^{-2})^3$

$(-4^3 \cdot x^{\square} \cdot y^{\square})$

*Negative exponents take reciprocal!

Give me a Z! G'me an ESTY! PUT IT TOGETHER! ZESTY!

7) The formula for the area of a trapezoid is $A = \frac{1}{2}h(a+b)$, where h represents the height and a and b represent the lengths of the bases. What is the area of a trapezoid that has a height of 6 ft and base measures of 8 feet and 9 feet, respectively.

A. $8.5\,ft^2$
B. $11.5\,ft^2$
C. $20\,ft^2$
D. $51\,ft^2$

Givens:

h =

a =

b =

Now substitute & evaluate:

8) In a circuit, $E = IR$, where E = number f volts, I = number of amperes, and R = number of ohms. How much electrical pressure, in volts, does a circuit produce if the number of amperes is 9 and the resistance is 3 ohms?

A. 3
B. 6
C. 9
D. 12
E. 27

Givens:

*Follow steps from #7

9) Simplify:

$(5x+5)(3x+6)$

F:

O:

I:

L:

*Remember, $x \cdot x = x^2$

10) Simplify:

$(4x-5y)(6x-5y)$

11) Find the slope:

$(11, -11), (-13, -9)$

12) Find the slope:

$y = -\frac{2}{3}x + 3$

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Name: _____ TP: _____

HW71: Radical Equations, Substitution, FOIL, Slope
2015 Form A | Geometry
Due Date: Thursday, February 27th, 2014

Failure to show all work and write in complete sentences will result in LaSalle.

1) Solve:
$45 = 9\sqrt{p+9}$

→ What operation holds together 9 & $\sqrt{p+9}$?
Do the inverse!

2) Solve:
$19 = \sqrt{12x+4} + 9$

→ What operation holds together $\sqrt{12x+4}$ & 9 ?
Do the inverse!

3) Mr. Lee is ordering uniforms for the football team. A local uniform company has told him that the cost in dollars of printing each uniform can be modeled by the expression 15.50u + 17. If Mr. Lee orders 23 uniforms, how much would it cost to order the uniforms?
Givens:

4) The Legend of the Masai says that you should always study 2y + 3 hours each night, where y represents your age in years. If Rebecca is 15 years old, according to the legend, how many hours a night should she study?
Givens:

5) Analyze Hector's work below. *Correct and explain* his mistake in the box to the right.

Simplify:
$(2v+8)(5v-3)$

F: $2v(5v) = 10v$
O: $2v(-3) = -6v$
I: $8(5v) = 40v$
L: $8(-3) = -24$

$10v - 6v + 40v - 24$
$44v - 24$

Give me a Z! G'me an ESTY! PUT IT TOGETHER! ZESTY!

6) Simplify:

$(7n-7)(7n-6)$

7) Simplify:

$\dfrac{2a^{-3}b^{0}}{4ab^{-1}}$

$\dfrac{2 \cdot a^{-3} \cdot b^{0}}{4 \cdot a \cdot b^{-1}}$

① simplify $\frac{2}{4}$

② a^{-3} moves down. How many a's now?

③ b^{-1} moves up. $b^{0} = 1$!

8) Simplify:

$4xy^{4} \cdot -y$

$4 \cdot x \cdot y^{4} \cdot -y$

$4 \cdot -1 =$

$x =$

$y^{4+1} =$

9) Simplify:

$(m^{-2}n^{3})^{2}$

10a) Find the slope of the line passing through the two points below:

$(-4, -19), (15, -6)$

b) Write an equation in slope-intercept form (y = mx + b) that has the same slope as the line above:

11) Determine the slope of the lines below:

a) opposite of 7x is... ____

$7x + y = 5$

b) opposite of 2x is... ____

$2x + 5y = 20$ → opposite of 5y is... ____

Give me a Z! G'me an ESTY! PUT IT TOGETHER! ZESTY!